

**City of Sunnyvale**  
**Ten Year Project Costs**  
**by Project Category and Type**

Project Number	Project Name	Prior Years Actual	Revised Budget 2004-05	Plan 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Ten Year Plan Total	Project Grand Total
<div> <div>Category: Capital</div> <div>Type: Water</div> </div>															
805450	Water Reuse	19,835,274	363,319	0	0	0	0	0	0	0	0	0	0	0	20,198,593
806252	Water Main Development Costs (City Share)	0	35,799	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	254,794
806350	Water Meters for New Developments	770,168	60,334	59,800	60,996	62,216	63,460	64,729	66,024	67,345	68,691	70,065	71,467	654,793	1,485,295
806400	Doublecheck Valves & Backflow Devices for New Developments	311,878	50,166	50,000	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	547,486	909,530
824830	Perimeter Fencing Around Wells (Vulnerability Assessment)	0	40,000	0	0	0	0	0	0	0	0	0	0	0	40,000
824840	Installation of Climb Resistant Fencing at Reservoir Sites	0	102,000	100,000	0	0	0	0	0	0	0	0	0	100,000	202,000
825270	Well House Generator - Ortega Well	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>		20,917,320	651,618	229,800	132,396	135,044	137,744	140,500	143,310	146,176	149,099	152,081	155,124	1,521,274	23,090,212

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

## Project Information Sheet

### Project: 805450 Water Reuse

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	1988-89	Phase:	Construction	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	95	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project provided for the implementation of several Water Reuse opportunities identified in an analysis performed in 1984. The following areas were noted: Moffett Industrial Park Landscape Irrigation; Highway 237 Landscape Irrigation; Orchard Garden Park; Lakewood Park; and Industrial Usage (i.e. cooling and process in Moffett Industrial Park and adjacent areas). Also, system (polymer feed facility) and other process and monitoring devices have been installed at the Water Pollution Control Plant (WPCP) to allow the reclaimed water to be on unrestricted use. The construction of the project has been completed. Remaining funds are needed to make some modifications to the system at the WPCP and at the storage tank sites, such as emergency power backup at the San Lucar pumping station. Some modifications are also needed for the cathodic protection of the recycled water line.

Remaining funds in this project are needed to provide a potable water backup at the San Lucar water fill for system reliability. Modifications are also needed for cathodic protection of most of the almost 13 miles of recycled water line.

### Service Level

This project will improve service levels to recycled water customer base.

### Issues

None

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	19,835,274	363,319	0	0	0	0	0	0	0	0	0	0	0	20,198,593
<b>Revenues</b>														
<b>Total</b>	4,967	0	0	0	0	0	0	0	0	0	0	0	0	4,967
<b>Transfers-In</b>														
Fund Reserves		363,319	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	19,830,307	363,319	0	0	0	0	0	0	0	0	0	0	0	20,193,626
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 806252 Water Main Development Costs (City Share)

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	1999-00	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Barbara Keegan
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1B	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

Construction of a private development often results in the need to add or improve a water main to meet the added needs of the development. This improvement may also provide additional benefit to the City, outside the immediate needs of the development, by improving service to other customers on the main. Therefore, the entire cost of the improvement should not be the responsibility of the developer, but should be shared by the City. Per Municipal Code Section 18.16.010 Improvement Costs - Cost Sharing, the costs have to be shared by the City when the developer is required to provide water mains in excess of 8 inches.

This project provides ongoing funding to pay for the City's share of water mains constructed by private developers.

### Service Level

No service level effect

### Issues

See project 806250 and 806251 for prior year expenditure history.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	0	35,799	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	254,794
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		35,799	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	
<b>Total</b>	0	35,799	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	254,794
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 806350 Water Meters for New Developments

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	Ongoing	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The purpose of this project is to purchase and install water meters for new development activities. Costs are reimbursed to the Water Supply and Distribution Fund by the end user.

### Service Level

No service level effect

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	770,168	60,334	59,800	60,996	62,216	63,460	64,729	66,024	67,345	68,691	70,065	71,467	654,793	1,485,295
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		60,334	59,800	60,996	62,216	63,460	64,729	66,024	67,345	68,691	70,065	71,467	654,793	
<b>Total</b>	770,168	60,334	59,800	60,996	62,216	63,460	64,729	66,024	67,345	68,691	70,065	71,467	654,793	1,485,295
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 806400 Doublecheck Valves & Backflow Devices for New Developments

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	Ongoing	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The purpose of this project is to purchase and install detector checks and backflow devices for new development activities. Costs are reimbursed to the Water Supply and Distribution Fund by the end user.

### Service Level

No service level effect

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	311,878	50,166	50,000	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	547,486	909,530
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		50,166	50,000	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	547,486	
<b>Total</b>	311,878	50,166	50,000	51,000	52,020	53,060	54,122	55,204	56,308	57,434	58,583	59,755	547,486	909,530
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824830 Perimeter Fencing Around Wells (Vulnerability Assessment)

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	2004-05	Phase:	Design	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	10	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project involves the installation of chain link fences with pinch-point wires around four wells (Raynor, Ortega, Serra, and Westmoor), including landscaping and irrigation.

The Vulnerability Assessment (VA) study recommended installing the fences to secure Raynor, Ortega, and Westmoor wells, which have no fences. It also recommended repairing the existing fence around the Serra well and installing non-climb links. The Department of Health Services (DHS) has also highly recommended that the City install these fences.

### Service Level

This was a need identified by the Vulnerability Assessment study. The fence will provide higher security around City wells.

### Issues

Grant funding for this project will be pursued from Homeland Security (Prop 50) grants.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	0	40,000	0	0	0	0	0	0	0	0	0	0	0	40,000
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		40,000	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	0	40,000	0	0	0	0	0	0	0	0	0	0	0	40,000
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824840 Installation of Climb Resistant Fencing at Reservoir Sites

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	2004-05	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	Community Development, Parks and Recreation
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

Following the events of September 11, 2001, the United States Environmental Protection Agency (USEPA) received a supplemental appropriation from Congress to improve the safety and security of the nation's water supply. A grant program was established to assist local water utilities in responding to the threat of terrorist attacks and to improve the security of water utility infrastructure and operations. Priority activities included: 1. Developing a Water System Vulnerability Assessment (VA), which was given the highest priority under the grant program, since it is the first step in understanding how and where a water utility can be damaged by a terrorist attack; 2. Developing an Emergency Operations Plan to deal with the threats identified in the Vulnerability Assessment; and 3. Planning and designing projects to enhance the water utility's system security. With grant monies, the City of Sunnyvale contracted with a security and vulnerability assessment team to provide a vulnerability assessment. The assessment recommended the installation of fencing around vulnerable water system components as one of the least costly, most effective ways to protect the water system.

This project provides for the installation of climb-resistant fencing at all reservoir sites and the replacement of damaged cyclone fencing and gates, as needed. Landscaping around the fences may also be desired by residents to reduce the impact on neighborhoods. This solution requires removal of all existing fencing and installation of landscaping, which increases the cost of the project.

### Service Level

This is a need identified by the Vulnerability Assessment study. The climb-resistant fencing will provide higher security around City reservoirs.

### Issues

Grant funding for this project will be pursued from Homeland Security grants.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	0	102,000	100,000	0	0	0	0	0	0	0	0	0	100,000	202,000
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		102,000	100,000	0	0	0	0	0	0	0	0	0	100,000	
<b>Total</b>	0	102,000	100,000	0	0	0	0	0	0	0	0	0	100,000	202,000
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825270 Well House Generator - Ortega Well

Category:	Capital	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2007-08	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Board/Commission			Interdependencies:	Community Development, Parks and Recreation
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project involves construction of an emergency standby generator building for the Ortega well site and installation of a new backup propane generator.

An emergency standby generator is needed at this well site to provide electrical power in the event of a long-term power outage. During critical emergency situations, water supply from Hetch-Hetchy or the Santa Clara Valley Water District may be interrupted. In these instances, additional water supply and pressure from this well will be needed. This generator will be housed in an aesthetic enclosure to be acceptable to the surrounding land uses (park and residential). The project is scheduled to begin in FY 2016/2017 and will be completed in FY 2017/18. The total cost is estimated at \$636,473.

### Service Level

No service level effect.

### Issues

This project may qualify for Prop 50 funding. Staff will explore this possibility.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0